

CLAIM

1. An electrode comprising:
an electrode base, and
a self-assembled monolayer expressed by a chemical
5 structural formula of $\text{HS}(\text{CH}_2)_n\text{COOH}$ ($n = 5$ to 9) and
covering said electrode base.
2. An electrode as set forth in claim 1, wherein
an enzyme is immobilized on said self-assembled monolayer,
said enzyme making an object to be measured oxidation-
10 reduction react.
3. A sensor comprising:
a vessel receiving a sample solution in which an
object to be measured dissolves, and
a modified electrode and a counter electrode to be
15 dipped into said sample solution,
wherein said modified electrode comprises
an electrode base, and
a self-assembled monolayer expressed by a chemical
structural formula of $\text{HS}(\text{CH}_2)_n\text{COOH}$ ($n = 5$ to 9) and
20 covering said electrode base.
4. A sensor as set forth in claim 3, wherein a
mediator is added into said sample solution, said
mediator transferring a charge with said electrode base
under said oxidation-reduction reaction of said object.
- 25 5. A sensor as set forth in claim 4, wherein a

hydrophobic mediator is added into said sample solution.

6. A sensor as set forth in any one of claims 3 to 5, wherein an enzyme is immobilized on said self-assembled monolayer, said enzyme making said object
5 oxidation-reduction react.

7. A sensor as set forth in claim 3, further comprising:

a voltage applying means for applying an electrode reaction voltage to said modified electrode, and

10 a calculation means for calculating concentration of said object based on an electric current flowing between said modified electrode and said counter electrode.

8. A sensor as set forth in claim 7, further
15 comprising a reference electrode,

wherein said voltage applying means applies a predetermined voltage on the basis of a voltage of said reference electrode to said modified electrode.